

PATENT
Attorney Docket No. 64528-5003-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Robin Robinson *et al.***

Application No. 10/617,569

Filed: **July 11, 2003**

For: **Functional Influenza Virus
Like Particles (VLPs)**

Group Art Unit: 1648

Examiner: **Hill, Myron G**

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Alexandria, VA 22314

SECOND INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(b)

Pursuant to 37 C.F.R. 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO-1449 forms. Pursuant to the rules pertaining to applications filed after June 30, 2003, copies of the U.S. references are not enclosed. Copies of the other listed documents are attached. This Information Disclosure Statement is being filed, to the best of the undersigned's knowledge, before the mailing date of a first Office Action on the merits for the above-referenced application. Accordingly, Applicants do not believe that a fee is due with the filing of this paper.


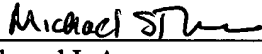
Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute prior art. If the Examiner applies any one of the documents as prior art against any claim in the application, and Applicants determine that the cited document does not constitute prior art under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such document.

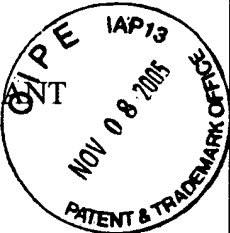
Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Except for issue fees payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

Dated: November 8, 2005
Morgan, Lewis & Bockius LLP
Customer No. 09629
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
202-739-3000

Respectfully submitted
Morgan, Lewis & Bockius LLP


 Reg. 43,212
Edward I. Amaya
Registration No. 54,960

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		ATTY DOCKET NO.	APPLICATION NO
		064528-5003-US	10/617,569
		APPLICANT Robin Robinson et al.	
FILING DATE July 11, 2003		GROUP 1648	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A01	6,649,372	11/18/03	Palese et al.	435	69.1	
	A02	2003/0035814	2/20/03	Kawaoka et al.	424	208.1	
	A03						
	A04						
	A05						
	A06						
	A07						
	A08						
	A09						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	B01	WO 96/37624	11/28/96	WIPO (in English)				
	B02							
	B03							
	B04							
	B05							

EXAMINER

DATE CONSIDERED

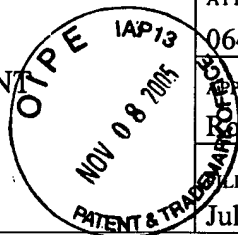
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		ATTY DOCKET NO.	APPLICATION NO
		064528-5003-US	10/617,569
		APPLICANT	
		Robin Robinson et al.	
		FILING DATE	GROUP
		July 11, 2003	1648

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)		
C01		Ali, Ayub et al., "Influenza Virus Assembly: Effect of Influenza Virus Glycoproteins on the Membrane Association of M1 Protein", <u>Journal of Virology</u> , September 2000, Vol. 74, No. 18, pp. 8709-8719
C02		Bullido, Rosario et al., "Several Protein Regions Contribute to Determine the Nuclear and Cytoplasmic Localization of the Influenza A Virus Nucleoprotein", <u>Journal of General Virology</u> , 2000, 81, pp. 135-142
C03		Castrucci, Maria R. et al., "Reverse Genetics System for Generation of an Influenza A Virus Mutant Containing a Deletion of the Carboxyl-Terminal Residue of M2 Protein", <u>Journal of Virology</u> , May 1995, Vol. 69, No. 5, pp. 2725-2728
C04		Elster, Christine et al., "Influenza Virus M1 Protein Binds to RNA Through Its Nuclear Localization Signal", <u>Journal of General Virology</u> , 1997, 78, pp. 1589-1956
C05		Fodor, Ervin et al., "Rescue of Influenza A Virus from Recombinant DNA", <u>Journal of Virology</u> , Nov. 1999, Vol. 73, No. 11, pp. 9679-9682
C06		Gómez-Puertas, Paulino et al., "Efficient Formation of Influenza Virus-Like Particles: Dependence on the Expression Levels of Viral Proteins", <u>Journal of General Virology</u> , 1999, 80, pp. 1635-1645
C07		Gómez-Puertas, Paulino et al., "Influenza Virus Matrix Protein is the Major Driving Force in Virus Budding", <u>Journal of Virology</u> , Dec. 2000, Vol. 74, No. 24, pp. 11538-11547
C08		Hoffmann, Erich et al., "A DNA Transfection System for Generation of Influenza A Virus from Eight Plasmids", <u>PNAS</u> , May 23, 2000, Vol. 97, No. 11, pp. 6108-6113
C09		Kuroda, Kazumichi et al., "Expression of the Influenza virus Haemagglutinin in Insect Cells by a Baculovirus Vector", <u>The EMBO Journal</u> , 1986, Vol. 5, No. 6, pp. 1359-1365
C10		Li, Shengqiang et al., "Chimeric Influenza Virus Induces Neutralizing Antibodies and Cytotoxic T Cells Against Human Immunodeficiency Virus Type 1", <u>Journal of Virology</u> , November 1993, Vol. 67, No. 11, pp. 6659-6666
C11		Lyles, Douglas S. et al. "Subunit Interactions of Vesicular Stomatitis Virus Envelope Glycoprotein Stabilized by Binding to Viral Matrix Protein", <u>Journal of Virology</u> , January 1992, Vol. 66, No. 1, pp. 349-358
C12		Mena, Ignacio et al., "Rescue of a Synthetic Chloramphenicol Acetyltransferase RNA into Influenza Virus-Like Particles Obtained from Recombinant Plasmids", <u>Journal of Virology</u> , August 1996, Vol. 70, No. 8, pp. 5016-5024
C13		Neumann, Gabriele et al., "Generation of Influenza A Viruses Entirely from Cloned cDNAs", <u>Proc. Natl. Acad. Sci. USA</u> , August 1999, Vol. 96, pp. 935-9350
C14		Pattnaik, Asit K. et al., "formation of Influenza Virus particles Lacking Hemagglutinin on the Viral Envelope", <u>Journal of Virology</u> , December 1986, Vol. 60, No. 3, pp. 994-1001
C15		Pleschka, Stephan et al., "A Plasmid-Based Reverse Genetics System for Influenza A Virus", <u>Journal of Virology</u> , June 1996, Vol. 70, No. 6, pp. 4188-4192
C16		St. Angelo, Carol et al., "Two of the Three Influenza Viral Polymerase Proteins Expressed by Using Baculovirus Vectors Form a Complex in Insect Cells", <u>Journal of Virology</u> , February 1987, Vol. 61, No. 2, pp. 361-365

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)	ATTY DOCKET NO. 064528-5003-US	APPLICATION NO 10/617,569
	APPLICANT Robin Robinson et al.	
	FILING DATE July 11, 2003	GROUP 1648



OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

C17	Tobita, Kiyotake et al., "Spontaneous Excretion of Virus from MDCK Cells Persistently Infected with Influenza Virus A/PR/8/34", <u>Journal of General Virology</u> , 1997, 78, pp. 563-566
C18	Yasuda, Jiro et al., "Growth Control of Influenza A Virus by M1 Protein: Analysis of Transfectant Viruses Carrying the Chimeric M Gene", <u>Journal of Virology</u> , Dec. 1994, Vol. 68, No. 12, pp. 8141-8146
C19	Ye, Zhiping et al., "Nucleus-Targeting Domain of the Matrix Protein (M ₁) of Influenza Virus", <u>Journal of Virology</u> , March 1995, Vol. 69, No. 3, pp. 1964-1970
C20	Zhao, Hongxing et al., "The M1 and NP Proteins of Influenza A Virus Form Homo- but not Heterooligomeric Complexes when Coexpressed in BHK-21 Cells", <u>Journal of General Virology</u> , 1998, 79, pp. 2435-2446
C21	
C22	
C23	
C24	
C25	
C26	
C27	
C28	
C29	
C30	
C31	
C32	
C33	
C34	
C35	
C36	
C37	
C38	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	